

ABSTRACT

A switching power source comprises a current comparator 27 for comparing a voltage level of signals acquired by a current detector 9 with a reference voltage level V_{DT} to produce detection signals V_{CP} of first or second level L or H; an edge detector 28a for sensing an edge of drive signal V_G supplied to a gate terminal of MOS-FET 3 during the period of transition from turning on to off of MOS-FET 3; and a decision means 28b for receiving a current detection signal V_{CP} from current comparator 27 to produce an output signal V_{LD} when edge detector 28a catches an edge of drive signal V_G ; wherein decision means 28b produces different output signals V_{LD} of respectively first and second voltage levels L and H under the light and heavy load conditions to precisely and certainly detect on the primary side of transformer 2 the load condition on the secondary side of transformer 2 for improvement in conversion efficiency.